6. Process as claimed in claim 1, wherein the simulation region (Ω) is defined by storage of data which can be derived from computer-aided engineering (CAD/CAM).

7. Process as claimed in claim 1, wherein the grid width h is automatically established using stored values obtained empirically and/or analytically by a pertinent first evaluation function.

8. Process as claimed in claim 1, wherein a degree n is automatically determined using stored values obtained empirically and/or analytically by a pertinent second evaluation function.

11. Device for executing a process as claimed in claim 1, in particular a computer system, with input devices (31,32,33) and output devices (34), storage devices (37), and a central processing unit (35,36), where the regular grid structure is utilized for optimizing the computational process, especially by parallelization.

12. Machine-readable data medium (18), in particular magnetic tape, magnetic disk, compact disk (CD) or digital versatile disk (DVD), wherein the data medium stores a control program for a computer system (30), according to which the computer system (30) can execute a process, as claimed in claim 1